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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/749,407
Filing Date: December 28, 2000
Appellant(s): LIPSCOMB ET AL.

MAILED

SEP 10 2007

Technology Center 2600

Robert W. Griffith
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 5, 2007 appealing from the Office action mailed October 5, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,665,870	Finseth	12-2003
6,020,880	Naimpally	2-2000
6,973,663	Brown	12-2005
6,240,555	Shoff	5-2001
6,367,078	Lasky	4-2002
6,714,722	Tsukidate	03-2004
6,732,369	Schein	05-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 39-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Finseth et al. (Finseth), U.S. Patent No. 6,665,870. in view of Naimpally (US 6,020,880) and in further view of Brown (US 6,973,663).

Regarding **claims 39 and 40**, Finseth discloses a broadcast server (Fig. 2, Program Guide Transmitting System **46**) in a TV system and corresponding method, comprising:

- a) a correspondence table storing means (Fig. 2, Database **48**) for storing a dynamic table of correspondence between program classification categories and TV channel numbers (col. 6, line 57 – col. 7, line 10,

- where program guide database contains TV channel information (col. 8, lines 39-57) and program category information (col. 9, lines 7-20));
- b) creation means (Fig. 2; Data Entry Station 50) for hyperlinking information which contains a list of channels broadcasting the same nature of program by referencing the correspondence table (col. 7, lines 11-22 [manual entry of additional information]; col. 9, line 56 – col.10, line 9 [additional information including HTML hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category]); and
- c) transmitting means (Fig. 2; Combiner 42 and Uplink Dish 30) for transmitting the hyperlinking information to TV devices whereby upon successfully processing the hyperlinking information for display on a TV screen a viewer surfs among the channels specified in the hyperlinking information (col. 7, lines 34-43, describing transmission; col. 9, line 56 – col. 10, line 9; col. 16, lines 39-48 [channel selection by activating hyperlinks in narrative text]).

Finseth fails to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category of a program being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth to include the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

It is noted that the combination of Finseth and Naimpally still fails to disclose wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer.

The Examiner takes Official Notice that deducing a user profile by viewing habits would have been a notoriously well known means for providing a user with customized viewing content. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Finseth and Naimpally to include deducing a user profile by viewing habits to accurately provide a user with customized content to enhance a user's viewing experience.

Finseth and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth and Nimpally to make the recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

Regarding **claims 41 and 42**, Finseth discloses a receiver (Fig. 3, Receiver **64**) for surfing hyperlinked information in a TV system and corresponding method, comprising:

- a) storing apparatus (Fig. 3, Memory **78**) which receives program content including hyperlinks and related channels (col. 11, lines 41-42; col. 12, lines 13-18 [HTML objects received at Receiver **64**]; Fig. 6, col. 15, lines 15-25 [narrative text EPG, including hyperlinks to programming]; col. 16, lines 39-48 [Channel selection by activating hyperlinks]);
- b) classification information in the storing apparatus which relates program content related to related channels (col. 14, lines 10-59); and
- c) control apparatus (Fig. 3, CPU **74**) which enables a viewer to access the classification information and surf among related channels (col. 15, lines 15-23; col. 16, lines 22-47).

Finseth fails to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category of the

program being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth to include the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

It is noted that the combination of Finseth and Naimpally still fails to disclose wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer.

The Examiner takes Official Notice that deducing a user profile by viewing habits would have been a notoriously well known means for providing a user with customized viewing content. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Finseth and Naimpally to include deducing a user profile by viewing habits to accurately provide a user with customized content to enhance a user's viewing experience.

Finseth and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown

discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth and Nimpally to make the recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

- Regarding **claim 43**, Finseth discloses a broadcast server (Fig. 2, Program Guide Transmitting Means **46**) in a TV system, comprising:
- a) correspondence information (Fig. 2, Database **48**) between program classification categories and TV channel numbers (col. 6, line 57 – col. 7, line 10, where program guide database contains TV channel information (col. 8, lines 39-57) and program category information (col. 9, lines 7-20));
 - b) creation apparatus (Fig. 2; Data Entry Station **50**) which creates hyperlinking information of channels broadcasting the same nature of program classification categories by referencing the correspondence information (col. 7, lines 11-22 [manual entry of additional information]; col. 9, line 56 – col.10, line 9 [additional information including HTML

- hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category]); and
- c) transmitting apparatus (Fig. 2; Combiner 42 and Uplink Dish 30) which transmits the hyperlinking information to TV devices whereby upon successfully processing the hyperlinking information for display on a TV screen, a viewer surfs among the channels specified in the hyperlinking information (col. 7, lines 34-43, describing transmission; col. 9, line 56 – col. 10, line 9; col. 16, lines 39-48 [channel selection by activating hyperlinks in narrative text]).

Finseth fails to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category of the program being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer and the program classification category is selected by the system from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth to include

the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

It is noted that the combination of Finseth and Naimpally still fails to disclose wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer.

The Examiner takes Official Notice that deducing a user profile by viewing habits would have been a notoriously well known means for providing a user with customized viewing content. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Finseth and Naimpally to include deducing a user profile by viewing habits to accurately provide a user with customized content to enhance a user's viewing experience.

Finseth and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth and Nimpally to make the recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

Regarding **claim 44**, Finseth discloses a receiver (Fig. 3, Receiver **64**) for surfing hyperlinked information in a TV system, comprising:

- a) storing apparatus (Fig. 3, Memory **78**), which receives program content including hyperlinks and related channels (col. 11, lines 41-42; col. 12, lines 13-18 [HTML objects received at Receiver **64**]; Fig. 6, col. 15, lines 15-25 [narrative text EPG, including hyperlinks to programming]; col. 16, lines 39-48 [Channel selection by activating hyperlinks]);
- b) classification information of program content related to the same channels (col. 14, lines 10-59); and
- c) control apparatus (Fig. 3, CPU **74**), which enables a viewer to access the classification information and surf among related channels (col. 15, lines 15-23; col. 16, lines 22-47).

Finseth fails to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program category is selected by the system from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user

provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth to include the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

It is noted that the combination of Finseth and Naimpally still fails to disclose wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer.

The Examiner takes Official Notice that deducing a user profile by viewing habits would have been a notoriously well known means for providing a user with customized viewing content. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Finseth and Naimpally to include deducing a user profile by viewing habits to accurately provide a user with customized content to enhance a user's viewing experience.

Finseth and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth and Nimpally to make the

recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

Claims 14, 16-17, 19-22, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finseth et al. (Finseth), U.S. Patent No. 6,665,870 in view of Shoff et al. (Shoff), U.S. Patent No. 6,240,555 and Naimpally (US 6,020,880) and in further view of Brown (US 6,973,663).

Regarding **claims 14 and 22**, Finseth discloses a method for interactive TV contextual surfing using inter-channel hyperlink and corresponding program medium, comprising:

- a) creating program content including a description of program type for classification purposes (col. 4, line 56 – col. 5, line 8);
- b) transmitting the program content in a streaming data format to a broadcast station (Fig. 2, Transmission Station **26**) and a broadcast server (Fig. 2, Program Guide Transmitting System **46**; col. 5, lines 9-14; col. 6, lines 48-67);
- c) generating a correspondence table (Fig. 2, Database **48**) between program classification categories and TV channel numbers in the broadcast server (col. 6, line 57 – col. 7, line 10, where program guide database contains TV channel information (col. 8, lines 39-57) and program category information (col. 9, lines 7-20));

- d) creating a hyperlink information of channels that are broadcasting the same nature of programs by referencing the correspondence table (col. 7, lines 11-22 [manual entry of additional information]; col. 9, line 56 – col.10, line 9 [additional information including HTML hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category]);
- e) broadcasting the hyperlink information to a list of channels in the correspondence table (col. 7, lines 34-43);
- f) transmitting the broadcast program information to a TV device including a set-top box via a first channel (col. 7, line 52 – col. 8, line 20 [transmission of objects]; col. 9, lines 7-20 [general program object]);
- g) transmitting the hyperlinking information to the set-top box (col. 7, lines 52 – col. 8, line 20 [transmission of objects]; col. 9, line 56 – col. 10, line 13 [HTML objects]); and
- h) processing the hyperlinking information by the set-top box for display on a TV screen (Figs. 4-6; col. 13, lines 31-67).

Although Finseth discloses transmitting hyperlink information to the set-top box, Finseth fails to disclose transmitting the hyperlinking information via a second channel, as claimed.

However, Shoff, in an analogous art, teaches transmitting supplemental content, including hyperlinking information, to a set-top box via a separate channel (Fig. 4, col. 7, lines 51-60, describing delivery of supplemental content; see col. 5, lines 18-22, describing supplemental content including “hyperlinks to

similar programs of a similar type..."). Utilizing separate (i.e., first and second) channels for the delivery of different types of content (e.g., EPG data and supplemental content data) provides the typical and well-known benefit of increased bandwidth for content transmitted to a receiver.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data transmission of Finseth to incorporate transmitting the hyperlinking information to the set-top box via a second channel, as taught by Shoff, for the benefit of increased bandwidth for transmitting content to a receiver in an interactive TV system.

Finseth and Shoff fail to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category of the program being viewed wherein the profile of the viewer is deduced from television viewing habits of the viewer, and the program classification category is selected from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth and Shoff to include the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

It is noted that the combination of Finseth, Shoff, and Naimpally still fails to disclose wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer.

The Examiner takes Official Notice that deducing a user profile by viewing habits would have been a notoriously well known means for providing a user with customized viewing content. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Finseth and Naimpally to include deducing a user profile by viewing habits to accurately provide a user with customized content to enhance a user's viewing experience.

Finseth, Shoff, and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth, Shoff, and Naimpally to make the recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

The limitation of **claims 16 and 24** is encompassed by the teachings of Finseth in view of Shoff and in further view of Naimpally and in further view of Brown, as discussed above. Specifically, Finseth discloses creating a hyperlink list of channels that are broadcasting the same nature of programs by referencing the correspondence table (col. 7, lines 11-22 [manual entry of additional information]; col. 9, line 56 – col.10, line 9 [additional information including HTML hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category])).

The limitation of **claims 17 and 25** is encompassed by the teachings of Finseth in view of Shoff and in further view of Naimpally and in further view of Brown, as discussed above. Specifically, Finseth discloses storing a dynamic table of correspondence between the program classification categories and the television channel numbers (col. 6, line 57 – col. 7, line 10, where program guide database contains television channel information (col. 8, lines 39-57) and program category information (col. 9, lines 7-20)).

The limitation of **claim 19** is encompassed by the teachings of Finseth in view of Shoff and in further view of Naimpally and in further view of Brown, as discussed above. Specifically, Finseth discloses the set-top apparatus stores television broadcast by program classification categories in a first classification table (Fig. 4, col. 14, lines 23-40).

The limitation of **claim 20** is encompassed by the teachings of Finseth in view of Shoff and in further view of Naimpally and in further view of Brown, as discussed above. Specifically, Finseth discloses transmitting the program content and hyperlinking information directly to the set-top boxes (Fig. 1, col. 5, lines 31-37). Shoff teaches transmitting the hyperlinking the program content and program classification categories in a separate channel (col. 7, lines 51-60).

As for **claim 21**, Finseth discloses generating and transmitting the program content and program classification categories in a data-streaming format (col. 7, line 51 – col. 8, line 4).

Claims 1-4, 6, 27-30, 32, 33-36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finseth et al. (Finseth), U.S. Patent No. 6,665,870 in view of Lasky, U.S. Patent No. 6,367,078 and Naimpally (6,020,880) and in further view of Brown (US 6,973,663).

As for **claim 1**, Finseth discloses an interactive TV content surfing system comprising:

- a) creating apparatus (Fig. 2; Program Guide Data Transmitting System **46**), which creates interactive television program content for hyperlinking to other program content (col. 7, lines 11-22 [manual entry of additional

- information]; col. 9, line 56 – col.10, line 9 [additional information including HTML hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category]);
- b) broadcast apparatus (Fig. 2; Combiner **42** and Uplink dish **30**) which broadcasts interactive TV program content with hyperlinks to the other program content (col. 7, lines 34-43; col. 7, lines 52 – col. 8, line 20 [transmission of objects]; col. 9, line 56 – col. 10, line 13 [HTML objects]);
 - c) receiver apparatus (Fig. 3, Receiver **64**) which receives and processes the interactive TV program content with hyperlinks for display to a viewer (Figs. 4-6; col. 13, lines 31-67); and
 - d) enabling apparatus (Fig. 3, CPU **74**; col. 11, lines 50-55), which enables the viewer to hyperlink to a related program (col. 15, lines 15-23; col. 16, lines 39-48).

Although Finseth discloses enabling a viewer to hyperlink to a related program, Finseth fails to specifically disclose hyperlinking from interactive program content being viewed to a related program, as claimed.

However, Lasky, in an analogous art, teaches surfing (i.e., hyperlinking) from a program being viewed to a related program (Fig. 6b; col. 6, lines 31-49; col. 9, lines 1-27) for the benefit of providing a more intuitive electronic program guide system (see col. 4, line 4-8).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the enabling apparatus of Finseth

to incorporate hyperlinking from a program being viewed to a related program, as taught by Lasky, for the benefit of providing a more intuitive electronic program guide system in an interactive TV system.

Finseth and Lasky fail to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category of the program being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth and Lasky to include the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

It is noted that the combination of Finseth and Naimpally still fails to disclose wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer.

The Examiner takes Official Notice that deducing a user profile by viewing habits would have been a notoriously well known means for providing a user with customized viewing content. Therefore, it would have been obvious to one having ordinary skill in

the art at the time the invention was made to modify the combination of Finseth and Naimpally to include deducing a user profile by viewing habits to accurately provide a user with customized content to enhance a user's viewing experience.

Finseth, Lasky, and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth, Laskey, and Naimpally to make the recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

The limitation of **claim 2** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claim 1. Specifically, Lansky teaches the enabling apparatus enables the viewer to hyperlink from a scheduled program to a related program (Fig. **6b**; col. 6, lines 31-49; col. 9, lines 1-27, where a program currently being viewed is inherently a "scheduled" program).

The limitation of **claim 3** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claim 1. Specifically, Finseth discloses the enabling apparatus enables the viewer to hyperlink to a recording dialog when a related program may be broadcast in the future (Fig. 8; col. 17, lines 25-31).

The limitation of **claim 4** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claim 1. Specifically, Finseth discloses:

the broadcast apparatus which transmits interactive television program content and program the classification category together to the receiver apparatus (col. 7, lines 34-43), wherein the control apparatus (EPG of Fig. 6) enables the viewer to interact with the interactive television program content (col. 15, lines 15-25; col. 16, lines 22-48).

The limitation of **claim 6** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claim 1. Specifically, Finseth discloses:

- j) receiver apparatus which provides alternative hyperlinking of program content (col. 6, lines 21-39, where hyperlinking is to additional information, such as plot information or list of actors, or any program information).

Regarding **claims 27 and 33**, Finseth discloses a method for contextual surfing in an interactive TV computer system and corresponding program medium, comprising:

- a) creating interactive television program content for hyperlinking to other program content (col. 7, lines 11-22 [manual entry of additional information]; col. 9, line 56 – col. 10, line 9 [additional information including HTML hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category]);
- b) broadcasting the interactive TV program content with hyperlinks to other content (col. 7, lines 34-43; col. 7, lines 52 – col. 8, line 20 [transmission of objects]; col. 9, line 56 – col. 10, line 13 [HTML objects]);
- c) receiving and processing the interactive TV program content with hyperlinks for display to a viewer (Fig. 3, Receiver 64; Figs. 4-6, col. 13, lines 31-67); and
- d) enabling a viewer to hyperlink to a related program (col. 15, lines 15-23; col. 16, lines 39-48).

Although Finseth discloses hyperlinking to select programs in a related category, Finseth fails to specifically disclose disclose hyperlinking from a program being viewed to a related program, as claimed.

However, Lasky, in an analogous art, teaches surfing (i.e., hyperlinking) from interactive television program content being viewed to a related program

(Fig. 6b; col. 6, lines 31-49; col. 9, lines 1-27) for the benefit of providing a more intuitive electronic program guide system (see col. 4, line 4-8).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the program selection of Finseth to incorporate hyperlinking from a program being viewed to a related program, as taught by Lasky, for the benefit of providing a more intuitive electronic program guide system in an interactive TV system.

Finseth and Lasky fail to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category of the program being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category selected by the system from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth to include the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

It is noted that the combination of Finseth, Lasky and Naimpally still fails to disclose wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer.

The Examiner takes Official Notice that deducing a user profile by viewing habits would have been a notoriously well known means for providing a user with customized viewing content. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Finseth and Naimpally to include deducing a user profile by viewing habits to accurately provide a user with customized content to enhance a user's viewing experience.

Finseth, Lasky, and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth, Laskey, and Naimpally to make the recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

The limitation of **claims 34 and 28** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claims 33 and 27. Specifically, Lasky teaches enabling the viewer to hyperlink from a scheduled program to a related program (Fig. **6b**; col. 6, lines 31-49; col. 9, lines 1-27, where a program currently being viewed is inherently a “scheduled” program).

The limitation of **claims 35 and 29** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claims 33 and 27. Specifically, Finseth discloses enabling the viewer to hyperlink to a recording dialog when a related program may be broadcast in the future (Fig. **8**; col. 17, lines 25-31).

The limitation of **claims 36 and 30** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claims 33 and 27. Specifically, Finseth discloses broadcasting the interactive television program content and the program classification category together to the receiver (col. 7, lines 34-43; col. 7, lines 52 – col. 8, line 20 [transmission of objects to Receiver **64** (Fig. **3**)]; col. 9, line 56 – col. 10, line 13 [HTML objects]) and interacting with the interactive television program content (col. 15, lines 15-23; col. 16, lines 39-48 [hyperlinking to programming of related content]).

The limitation of **claims 38 and 32** is encompassed by the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claims 33 and 27. Specifically, Finseth discloses providing alternative hyperlinking of program content (col. 6, lines 21-39, where hyperlinking is to additional information, such as plot information or list of actors, or any program information).

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finseth et al. (Finseth), U.S. Patent No. 6,665,870 in view of Shoff et al. (Shoff), U.S. Patent No. 6,240,555, further in view of Lasky, U.S. Patent No. 6,367,078, and still further in view of Naimpally (US 6,020,880) and in further view of Brown (US 6,973,663).

As for **claim 7**, Finseth discloses an interactive TV contextual content surfing system using inter-channel hyperlinking (Fig. 1), comprising:

- a) a content creation station (Fig. 1, data from Schedule Feeds **24** inherently discloses a 'content creation station' for generating the content) generating and transmitting interactive program information and classification information as streaming data (col. 4, line 56 – col. 5, line 8; col. 5, lines 9-14; col. 6, lines 48-67);

- b) a TV broadcast station (Fig. 2, Transmission station 26) for receiving the streaming data (col. 5, lines 2-8);
- c) a broadcast server (Fig. 2; Program Guide Data Transmitting System 46) for processing classification categories in the streaming data and hyperlinking program information in related categories (col. 7, lines 11-22 [manual entry of additional information]; col. 9, line 56 – col.10, line 9 [additional information including HTML hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category]);
- d) a network (Fig. 1; Satellite 32) coupled to the TV broadcast station for transmitting the interactive TV program information and the classification directly to set-top boxes (col. 5, lines 25-37); and
- e) viewer means including an interface enabling a viewer to view a program in a category (Fig. 6; col. 15, lines 15-25; col. 16, lines 39-48).

Although Finseth discloses transmitting the TV program information and hyperlink information directly to the set-top box, Finseth fails to disclose transmitting the hyperlinking information via a separate channel, as claimed.

However, Shoff, in an analogous art, teaches transmitting supplemental content, including hyperlinking information, to a set-top box via a separate channel (Fig. 4, col. 7, lines 51-60, describing delivery of supplemental content; see col. 5, lines 18-22, describing supplemental content including “hyperlinks to similar programs of a similar type...”). Utilizing separate (i.e., first and second) channels for the delivery of different types of content (e.g., EPG data and

supplemental content data) provides the typical and well-known benefit of increased bandwidth for content transmitted to a receiver.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data transmission of Finseth to incorporate transmitting the hyperlinking information to the set-top box via a second channel, as taught by Shoff, for the benefit of increased bandwidth for transmitting content to a receiver in an interactive TV system.

Although Finseth discloses hyperlinking to select programs in a related category, the combination of Finseth in view of Shoff fails to specifically disclose hyperlinking from a program being viewed to a related program, as claimed.

However, Lasky, in an analogous art, teaches surfing (i.e., hyperlinking) from a program being viewed to a related program (Fig. 6b; col. 6, lines 31-49; col. 9, lines 1-27) for the benefit of providing a more intuitive electronic program guide system (see col. 4, line 4-8).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the viewer means of Finseth in view of Shoff to incorporate hyperlinking from a program being viewed to a related program, as taught by Lasky, for the benefit of providing a more intuitive electronic program guide system in an interactive TV system.

Finseth, Shoff, and Lasky fail to disclose the claimed the related program is selected by the system based on a profile of the viewer and a program classification category of the program being viewed wherein the profile of the viewer is deduced by

the system from television viewing habits of the viewer, and the program classification category selected by the system from a plurality of classification categories for the program being viewed.

In analogous art, Naimpally discloses linking to a server to get additional information, where the additional information is filtered or 'selected' by the information provider and/or television receiver based on selected program categories and a user provided profile (see Abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finseth to include the claimed limitation to provide more customized contextual content by considering both a user profile and classification categories.

Finseth, Lasky, Shoff, and Naimpally fail to disclose that channels specified are selected using a classification category selected by the system independent of viewer input. Brown discloses that channels specified are selected using a classification category selected by the system independent of viewer input (the system recommends programs to user, fig. 8.148 and 8.150 based on a show "Splash," fig. 8.147, such as "Grumpy Old Men," partly because it is a comedy, fig. 9.156B).

At the time of invention it would have been obvious to one skilled in the art to combine the category selection independent of viewer input as done in Brown, an analogous art, with the television system of Finseth, Laskey, Shoff, and Naimpally to make the recommendation process easy for the viewer and to recommend programs that the user may not otherwise thought of.

The limitation of **claim 8** is encompassed by the teachings of Finseth in view of Shoff, further in view of Lasky, and in further view of Naimpally and Brown, as discussed above relative to claim 7. Specifically, Finseth discloses storing apparatus (Fig. 2; Database 48) in the broadcast server that stores a dynamic table of correspondence between the classification categories and channel numbers (col. 6, line 57 – col. 7, line 10, where program guide database contains television channel information (col. 8, lines 39-57) and program category information (col. 9, lines 7-20)).

The limitation of **claim 9** is encompassed by the teachings of Finseth in view of Shoff, further in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claim 7. Specifically, Finseth discloses server apparatus which creates a hyperlink list of channels that are broadcasting the same nature of programs by referencing a correspondence table (col. 7, lines 11-22 [manual entry of additional information]; col. 9, line 56 – col.10, line 9 [additional information including HTML hyperlinks]; col. 14, lines 10-59 [ordering narrative text according to program category]).

The limitation of **claim 10** is encompassed by the teachings of Finseth in view of Shoff, further in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claim 7. Specifically, Finseth discloses server apparatus which transmits hyperlink information to the set-top box (col. 7,

lines 11-22; col. 9, line 56 – col.10, line 9). Shoff teaches transmitting hyperlink information on a separate channel col. 7, lines 51-60, describing delivery of supplemental content; see col. 5, lines 18-22, describing supplemental content including “hyperlinks to similar programs of a similar type...”).

The limitation of **claim 11** is encompassed by the teachings of Finseth in view of Shoff, further in view of Lasky and in further view of Naimpally and Brown, as discussed above relative to claim 7. Specifically, Finseth discloses the set-top apparatus stores television broadcast by categories in a first classification table (Fig. 4, col. 14, lines 23-40).

Claims 5, 31 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finseth et al. (Finseth), U.S. Patent No. 6,665,870, in view of Lasky, U.S. Patent No. 6,367,078 and Naimpally (US 6,020,880) and in further view of Brown (US 6,973,663), as applied to claims 1, 27 and 33.

As for **claim 5**, the teachings of Finseth in view of Lasky and in further view of Brown are relied upon as discussed above relative to claim 1. Finseth in view of Lasky fails to disclose the control apparatus at the receiver grouping program content by deduction based on information provided by the user, as claimed.

Brown, in an analogous art, teaches a receiver control apparatus that groups program content by deduction based on information provided by the viewer (such as storing 'preferred programs' in memory for use in searching later, col. 10, lines 2-6).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Finseth in view of Lasky to incorporate a control apparatus at a receiver that groups program content by deduction based on viewer TV habits, as taught by Brown, for the benefit of allowing a viewer to quickly find a program of greatest interest without having to tediously search through large numbers of available programs in an interactive TV system.

As for **claims 31 and 37**, the teachings of Finseth in view of Lasky and in further view of Naimpally and Brown are relied upon as discussed above relative to claims 27 and 33. The combination of Finseth in view of Lasky and Naimpally fails to disclose grouping program content at the receiver by deduction based on information provided by the user, as claimed.

Brown, an analogous art, teaches a receiver control apparatus that groups program content by deduction based on information provided by the user (such as storing 'preferred programs' in memory for use in searching later, col. 10, lines 2-6).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Finseth in view of Lasky and in further view of Naimpally to incorporate a control apparatus at a receiver that groups program content by deduction based on viewer TV habits, as taught by Brown, for the benefit of allowing a viewer to quickly find a program of greatest interest without having to tediously search through large numbers of available programs in an interactive TV system.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finseth et al. (Finseth), U.S. Patent No. 6,665,870 in view of Shoff et al. (Shoff), U.S. Patent No. 6,240,555, further in view of Lasky, U.S. Patent No. 6,367,078 and Naimpally (US 6,020,880) and in further view of Brown (US 6,973,663), as applied to claim 7, further in view of Tsukidate, U.S. Patent No. 6,714,722.

As for **claim 13**, the teachings of Finseth in view of Shoff, further in view of Lasky, and in further view of Naimpally and Brown are relied upon as discussed above relative to claim 7. Finseth in view of Shoff, further in view of Lasky, and in further view of Naimpally and Brown fail to disclose the local storing apparatus in the set-top box which stores recorded programs and classifies categories of programs in a third classification table, as claimed.

However, Tsukidate, in an analogous art teaches a set top box (Fig. 2, Digital Multimedia Recorder 5) including a local storing apparatus which stores recorded programs and classification categories in a recorded programs

classification table (Fig. 8, Recorded Program Information Table **47** including category code **137**; col. 4, lines 8-51; col. 7, lines 21-31; see col. 5, lines 19-34 describing program information data recorded, including category code **137**) for the benefit of improved management of recorded programming (see col. 2, lines 7-12).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the set-top box of Finseth in view of Shoff, further in view of Lasky and in further view of Naimpally and Brown to incorporate a local storing apparatus which records stored programs and classifies categories of program in a third classification table, as taught by Tsukidate, for the benefit of improved management of recorded programming in an interactive TV system.

Claims 18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finseth et al. (Finseth), U.S. Patent No. 6,665,870 in view of in view of Shoff et al. (Shoff), U.S. Patent No. 6,240,555 and Naimpally (US 6,020,880) and in further view of Brown (US 6,973,663), as applied to claims 14 and 22, further in view of Tsukidate, U.S. Patent No. 6,714,722.

As for **claims 18 and 26**, the teachings of Finseth in view of Shoff and in further view of Brown are relied upon as discussed above relative to claims 14 and 22. Finseth in view of Shoff and in further view of Brown fail to disclose the

local storing apparatus which stores recorded programs and classifies categories of programs in a third classification table, as claimed.

However, Tsukidate, in an analogous art teaches a set top box (Fig. 2, Digital Multimedia Recorder 5) including a local storing apparatus which stores recorded programs and the program classification categories in a recorded programs classification table (Fig. 8, Recorded Program Information Table 47 including category code 137; col. 4, lines 8-51; col. 7, lines 21-31; see col. 5, lines 19-34 describing program information data recorded, including category code 137) for the benefit of improved management of recorded programming (see col. 2, lines 7-12).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Finseth in view of Shoff and in further view of Brown to incorporate a local storing apparatus which records stored programs and classifies categories of program in a third classification table, as taught by Tsukidate, for the benefit of improved management of recorded programming in an interactive TV system.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over (Finseth) et al. (Finseth), U.S. Patent No. 6,665,870 in view of in view of Shoff et al. (Shoff), U.S. Patent No. 6,240,555, further in view of Lasky, U.S. Patent No. 6,367,078, and Naimpally (US 6,020,880) and in further view of Brown (US 6,973,663) as applied to claim 7, further in view of Schein et al. (Schein), U.S. Patent No. 6,732,369.

As for **claim 12**, the teachings of Finseth in view of Shoff, further in view of Lasky and in further view of Naimpally and Brown are relied upon as discussed above relative to claim 7. The combination of Finseth in view of Shoff, further in view of Lasky and in further view of Naimpally and Brown fail to disclose the set-top box apparatus storing classification categories in a TV program guide in a second classification table, as claimed.

However, Schein, in an analogous art, teaches an electronic program guide in a set-top wherein program classification categories are stored in a separate classification table (Fig. 8, col. 11, lines 40-51) for the benefit of enhancing the user's ability to locate a program with a particular theme.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the set-top box of Finseth in view of Shoff, further in view of Lasky and in further view of Naimpally and Brown to incorporate storing categories programs in a TV program guide in a second classification table, as taught by Schein, for the benefit of enhancing the user's ability to locate a program with a particular theme.

(10) Response to Argument

In response to the appellant's arguments, the examiner respectfully disagrees that the rejection should be reversed. Only those arguments raised by the appellant pursuant to the particular issues on appeal have been considered and addressed by the

examiner. Any further arguments regarding particular limitations not specifically argued or other reasoning regarding deficiencies in a prima facie case of obviousness that the appellant could have made are considered as having been conceded by the appellant for the basis of the decision of this appeal and are not being subsequently addressed by the examiner for the Board's consideration. Should the panel find that the examiner's position/arguments or any aspect of the rejection is not sufficiently clear or a particular issue is of need of further explanation, it is respectfully requested that the case be remanded to the examiner for further explanation prior to the rendering of a decision.

In part I of the "Argument" section filed with the Office on April 5, 2007, the appellant disputes the rejection of Claims 39-44 made by the examiner in the Final Rejection mailed October 5, 2006. Specifically, the appellant traverses the U.S.C. 103(a) rejection of the above claims stating that the examiner failed to make his case for the obviousness of the combination of the three pieces of prior art: Finseth, Naimpally, and Brown.

After brief summarizing the contents of Independent Claim 39, the appellant then proceeds to traverse specific issues with the rejection of the claim. After noting that the examiner relied upon Finseth to teach all the limitations of Claim 39 except for the selection of the related program by the system based on a profile of the viewer and a program classification category of a program being viewed wherein the profile of the viewer is deduced by the system from television viewing habits of the viewer, and the program classification category is selected by the system from a plurality of classification categories for the program being viewed. The appellant then asserts that

Finseth fails to disclose a dynamic table of correspondence between program classification categories and television channel numbers.

The examiner must respectfully disagree. Finseth does teach a dynamic table of correspondence between program classification categories and television channel numbers. Finseth, in columns 6 and 7, lines 58-67 and 1-10, discloses a program guide database that links channels to channel numbers. This program guide database also contains scheduling data and editorial information (col. 7, lines 11-23) which can be created for the program guide. This also includes channel information, including category information, that is also associated with the channels. Therefore, Finseth teaches a dynamic table (such as an alterable database) of correspondence between program classification categories and television channel numbers.

After stating that the examiner relies on Naimpally and Brown to disclose limitations of the claim not found in Finseth, the appellant disputes the examiner's use of Naimpally in the rejection. Specifically, the appellant argues that Naimpally fails to disclose that the channel list provided to user is based on categories selected by the system for the program being viewed, and, therefore, does not necessarily contain the same nature of the program.

The examiner respectfully disagrees. Naimpally does disclose that the channel list provided to user is based on categories selected by the system for the program being viewed, and, therefore, does not necessarily contain the same nature of the program. Naimpally shows that channels can be filtered by the use of categories

(abstract and col. 6, lines 27-58). This filtering is done by the receiver (as opposed to the viewer, who can manually edit the list of channels presented, col. 6, lines 26-42) and is based on categories (such as "sports," col. 6, lines 53). Moreover, these categories of Naimpally are clearly the same type of categories as in Finseth (for instance, they both specifically mention "sports" and as well as "drama," Naimpally, table 1B).

Finally, the appellant traverses the use of Brown in the U.S.C 103(a) rejection of Claim 39. The appellants assert that Brown fails to disclose that the program being selected for a similarity search is a program being viewed, a selection of a category for the program by the system, that the program category is selected from a plurality of categories for that program, and, finally, that a single attribute for a television program being viewed is selected by the system for use in selecting television programs.

The examiner respectfully disagrees. Brown discloses a method of selection that allows a user to ask the system for similar programs to the program he is watching or interested in (col. 10, lines 7-40). The system then picks the category for selecting such as directors of programs or actors in programs or types of movie (such as given in the explanation for recommended programs in figs. 8-12). The system then uses an attribute such as a particular actor or actress (such as Daryl Hannah, fig. 9b) and makes a recommendation (such as for "Grumpy Old Men").

To establish a prima facie case of obviousness, the examiner must establish three things. First, the prior art references must disclose all limitations present in the Claim. Second, there must be a reasonable expectation of success. Third, there must

be a suggestion or motivation to combine the reference teachings. In the previous paragraph, the examiner has again shown that all limitations of the claim have, indeed, been met by the prior art references. Also, it would have been known to one skilled in the art at the time of the invention that all three references are drawn to a similar platform for interactive multimedia reception and could be safely combined with each other without fear of failure. Finally, as has previously been shown by the examiner, most recently in the Office Action mailed October 5, 2006, there is reason for combining these three references to each other. It would have been obvious to one skilled in the art at the time of the invention to add the filtering of Naimpally, an analogous art, the program guide of Finseth to provide more customization in the system. Moreover, it would have been obvious to one skilled in the art at the time of invention to combine the category selection of Brown, an analogous art to television system of Finseth and Naimpally to make the recommendation process easier for the viewer. Since the examiner has met all three requirements for a prima facie case of obviousness, he, therefore, maintains the rejection of Claim 39.

In section I of the "Argument," the appellant argues that Claims 40-44 are allowable for the same reasons as Claim 39. In sections II-VIII, the appellant argues that Claims 1-14, 16-22, and 24-38 are allowable for at least the same reasons as Claim 39, discussed in section I. These reasons have already been fully addressed by the examiner and, therefore, the examiner maintains these rejections as well.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

DRO

August 31, 2007


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